

PATENT SPECIFICATION

1,194,886



NO DRAWINGS

1,194,886

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Date of filing Complete Specification: 30 May, 1968.

Date of Application (No. 33367/67): 20 July, 1967.

Complete Specification Published: 17 June, 1970.

Index at Acceptance:—B2 E (1C, 1H); D1 R3.

International Classification:—D 06 m 15/16, D 06 n 7/06.

COMPLETE SPECIFICATION

Improvements in the Production of Tufted or Pile Carpets

We, GREENBANK ENGINEERING COMPANY LIMITED, of Gate Street, Blackburn, County of Lancaster, a British Company, do hereby declare the invention, for which we pray 5 that a patent may be granted to us, and the method by which it is to be performed to be particularly described in and by the following statement:—

This invention relates to the production of 10 tufted, needled or pile carpet fabrics.

It has been proposed to produce a carpet fabric in which the tufts or pile are locked in position by a latex backing and hitherto in the production of such carpet fabrics a 15 resin impregnating process has been carried out on the fabric after the application of the latex backing. Since the latex backing is impervious and therefore heated air cannot be drawn through the impregnated fabric 20 to dry it, the drying of the impregnated fabric is lengthy and costly.

It has been found that the fabric can be impregnated with resin before the application of the latex backing and whilst the fabric 25 is still pervious to the passage of heated air and consequently the fabric can be dried by suction means, thereby facilitating the drying of the resin impregnated fabric and decreasing the drying time.

The essence of the present invention is accordingly a method for the production of a tufted, needled or pile carpet fabric comprising impregnating a tufted, needled or pile fabric with a resin applied as an aqueous dispersion, passing the impregnated fabric through a squeeze mangle to provide an even distribution of the resin through the fabric, passing the impregnated fabric to the conveyor of a suction drier so that moisture is extracted from the fabric and the resin hardened by the passage of heated air through the fabric.

In carrying out the invention into effect

[Price 5s. 0d.]

the carpet fabric is impregnated with the resin by known conventional procedure, i.e. 45 it is drawn off from a reel through a trough containing an aqueous dispersion of the resin and then between the rollers of a squeeze mangle to give an adequate and even distribution of the resin through the fabric. From 50 the squeeze mangle the fabric passes to the conveyor of a conveyor type suction drier in which it is dried and the resin hardened by the passage of heated air through the fabric. From the suction drier the fabric 55 passes to a machine of known conventional type for the application of the latex backing. By the use of a suitable resinous dispersion the process imparts to the cheaper type of tufted, needled or pile carpet fabric a 60 wear resistance comparable to a good quality hard floorcovering and the method employed enables the process to be carried out at a production rate much in excess of that of methods used heretofore on an already backed fabric and with the use of conventional type of drying equipment.

With certain kinds of tufted, needled or pile carpet fabrics it is found that the method of applying the resin before application of 70 the latex sufficiently binds or locks the tufts or pile in the fabric without the application of a latex backing thereby further increasing the production rate and decreasing the cost of production.

WHAT WE CLAIM IS:—

1. A method for the production of tufted, needled or pile carpets comprising impregnating a tufted, needled or pile fabric with a resin applied as an aqueous dispersion, 80 passing the impregnated fabric through a squeeze mangle to provide an even distribution of the resin through the fabric, passing the impregnated fabric to the conveyor of a suction drier so that moisture is extracted 85 from the fabric and the resin hardened by

the passage of heated air through the fabric.
2. A method for the production of tufted
needled or pile carpets as in Claim 1 in
which a latex backing is applied to the im-
pregnated carpet fabric.

5 3. A method for the production of tufted,
needled or pile carpets substantially as here-
inbefore described.

4. A tufted, needled or pile carpet when
produced by the method claimed in any one 10
of the preceding claims.

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Printed for Her Majesty's Stationery Office by The Tweeddale Press Ltd., Berwick-upon-Tweed. 1970
Published at the Patent Office, 25 Southampton Buildings, London WC2A 1AY from which copies
may be obtained